

WPS Capsule Filters

Symmetric Polyethersulfone (PES) Membrane



Excellent flow rates with high efficiency retention

High quality filtration of purified waters for multiple industries

Optimized membrane design for high throughput

Water Service Applications

- ◆ Process Water
- ◆ Ultrapure Water
- ◆ DI Water
- ◆ Pharmaceutical Waters

WPS Capsules are hydrophilic and manufactured with symmetric polyethersulfone (PES) membrane. PES membrane exhibits excellent flow rates with high efficiency retention.

WPS capsule filters are used for purified water filtration. The symmetric membrane used in WPS capsules guards against bacterial grow-through, reducing the potential for biofilm accumulation in systems.

Polyethersulfone is particularly suited for high flow rate filtration. The membrane allows optimization for high flow rates and high throughput.

WPS Capsule Filters - Filtration Area

Media	Capsule Length				
	2"	5"	10"	20"	30"
PES Membrane	1.0 ft ² (0.093m ²)	3.0 ft ² (0.279m ²)	7.0 ft ² (0.650m ²)	14.0 ft ² (1.301m ²)	21.0 ft ² (1.951m ²)

Flow Rate / Filtration Area

The following table represents typical water flow at a one psi (69 mbar) pressure differential across a single 2 inch capsule with 1.0 ft² (0.093 m²) of media with 1/2" FNPT ports. The test fluid is water at ambient temperature. Higher pressure drops are acceptable, but as flows increase the pressure drop of the housing becomes more apparent.

Pore Size	0.03 μm	0.10 μm	0.22 μm	0.45 μm
GPM	0.21	0.36	0.64	1.0
LPM	0.79	1.36	2.42	3.79

* For approximate flow rates for 5" through 30" capsules, refer to the appropriate cartridge data sheet

Construction Materials

Housing	Polypropylene
Filtration Media	Symmetric Polyethersulfone (PES) Membrane
Media Support	Polypropylene
End Caps	Polypropylene
Center Core	Polypropylene
Outer Support Cage	Polypropylene
Sealing Method	Thermal Bonding

Maximum Operating Parameters

Liquid Operational Pressure	80 psi (5.5 bar) at 20 °C (68 °F)
Gases Operational Pressure	60 psi (4.1 bar) at 20 °C (68 °F)
Operating Temperature	43 °C (110 °F) at 30 psi (2.1 bar) in water
Forward Differential Pressure	50 psid (3.4 bard) at 20 °C (68 °F)
Reverse Differential Pressure	40 psid (2.7 bard) at 20 °C (68 °F)
Recommended Changeout Pressure	35 psid (2.4 bard)

Sanitization/Sterilization

Chemical Sanitization Industry standard concentrations of hydrogen peroxide, paracetic acid, sodium hypochlorite and other selected chemicals.

Note WPS capsules are not to be used in steam.

FDA and EC Compliance

All Critical Process Filtration filters are made using materials that meet the FDA requirements for processing food and beverage products. These filters comply with Title 21 CFR sections 210.3 (b) (6) and 211.72, for non-fiber releasing filters. All materials used to make the filters are listed in European Commission Regulation EU/10/2011, Annex 1.

Extractables

WPS capsule filters generally exhibit low levels of non-volatile residues.

Quality Assurance and Standards

Critical Process Filtration uses state of the art computer controlled equipment to consistently produce high quality products as well as significantly reduce hand operations that can compromise quality. All manufacturing and testing is continuously monitored in real time so that data can be quickly and easily analyzed to facilitate improvements in both quality and cost.

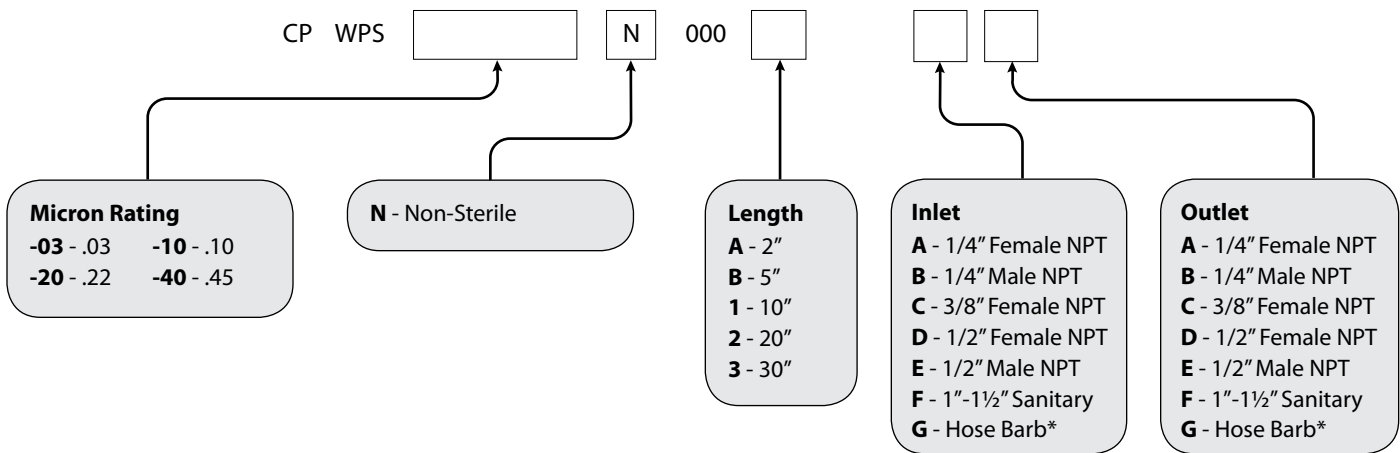
The Critical Process Filtration manufacturing and quality system meets rigorous ISO 9001:2008 standards. Each operation, including assembly, testing, cleaning, drying and packaging, is done in an appropriately rated clean room. Manufacturing is controlled using a sophisticated manufacturing system that networks work stations, manufacturing centers and inspection points. During the manufacturing and inspection processes, data is collected in real time to allow continuous quality monitoring and full traceability of all materials and processes.

Total Performance

Critical Process Filtration, Inc. is a vertically integrated manufacturer of filtration products to industries in which filtration is considered a critical part of the manufacturing process. We supply a complete line of products and services to help you cost effectively satisfy all your filtration requirements from a single source.

Ordering Information

Capsule order number example: Water Service Grade Symmetric PES Membrane, 0.22 Micron Rating, Non-Sterile, 10" Length, Sanitary Inlet, Sanitary Outlet = CPWPS-20N001FF.



Hose Barb Diameter Ranges*

	Minimum	Maximum
Outer Diameters	11/32" (8.6mm)	9/16" (14.0mm)
Inner Diameters	5/32" (4.0mm)	13/32" (10.5mm)

Request a QUOTE from your area representative



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